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:: :: No. XVI. :: ::

**Agriculture in Netherlands East
India in its legal, social and
geographical aspects.**



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NETHERLANDS-EAST-INDIAN SAN-FRANCISCO-COMMITTEE




DEPARTMENT OF AGRICULTURE,
INDUSTRY AND COMMERCE

No. XVI

AGRICULTURE IN NETHERLANDS EAST INDIA
IN ITS LEGAL, SOCIAL AND
GEOGRAPHICAL ASPECTS.

1914

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Liberian coffee in full flowering.

AGRICULTURE IN NETHERLANDS EAST INDIA IN ITS LEGAL, SOCIAL AND GEOGRAPHICAL ASPECTS.

Agriculture in general in Netherlands East India as a colonial asset deserves a special mention and even more so, because in the economy of the native community it may count for a providence and a refuge, and in synthesizing the colony and shaping it in its present mould it has been the most instrumental factor of all. It has as well in former as in present times been the builder of the colony's fortune and is for future times destined to remain the supporter of that fortune. The character the colony as a commercial body shows, is that of a producer and exporter of agricultural and mineral products and an importer of manufactured goods. The wealth of her exports during 1912 was roughly speaking \$ 239,000,000.— and of this aggregate 70% were furnished by agriculture*) and 5% by products of the wild and the jungle. As these figures demonstrate, the character which the colony as a commercial body has assumed, is the result of a close partnership of man with the soil, and the making of the colony as a commercial body has been chiefly due to the coöperation of the colony's soil and climate with man's activity. In this partnership both, man and soil, undoubtedly have supplied their part of activity. But while in other less mild parts of the earth husbanding the soil to serve human existence and human purposes often appears as a trouble and a struggle, at least requires the prevailing amount of energy on man's side, in many parts of Netherlands East India, on the contrary, the soil appears in the character of the friend, helpmate or partner ready to supply the paramount share of activity. It here does not enforce so much man

*) A statement, showing the value of the principal agricultural products exported during 1912, is found at the end of this pamphlet.

to dispute it its products by strenuous efforts but more liberally and uninterruptedly puts its energy at his disposal without much exertion on his side. It waits only for man's touch to turn out a creative power. The colony may not be devoid of mineral riches in its subsoil, the substantiality of her commercial possibilities lies on the surface of her soil in connection with her meteorologic and climatic conditions. Cleaned from forest and jungle this surface is without much preparatory work ready for immediate use and afterwards fit for continuous bearing, at least if adequately used. Simultaneously, in virtue of the horizontal and vertical extension of the land, it is open for a great variety of useful cultures. Cultures requiring a sharply distinguished wet and dry season, other ones requiring an equal oscillation of drought and rain, and still other ones requiring an outspoken damp and cold climate, find areas appropriated to their requirements. Mostly, however, sharply marked differences in the transitions of the horizontal and vertical extensions of the land are failing and the smooth transitions which are so characteristic for the mould of the land do not draw narrow barriers for the localisation of the various cultures but allow a liberal choice between them for the same plot of land. If, in spite of the prevailing natural conditions which therefore have the tendency to promote the originating of a miscellaneous agriculture in some parts of the land, a somewhat marked differentiation of the various cultures along certain lines has come into existence, the home land policy, law, social conditions of the inhabitants and historical tradition have to a certain extent to account for that phenomenon. Agriculture in Netherlands East India has been stamped by differences in soil and climate, by the character of the population, by the hand of tradition, and by law. In consequence of tradition and law it presents a particular aspect as a legal institute which now first of all may be considered.

In progress of time the ideas on the lawful use of the ground have in the Archipelago undergone a noticeable evolution which may be divided in three periods.

In the first one we see the conception adopted that the



Java coffee under dadap with pepper vines.

ground is a forbidden object for the exercise of direct rights of the living constituents of the community. In such parts of the Archipelago where the population continued to live grouped in mostly hostile clans, and no principalities were called into existence, the aggregate of the land was divided between these clans and each clan's district was considered not as the domain of the living but as the entail of the dead forefathers which had to be maintained by the living as the trustees of the dead in accordance with the customs and views of these dead: in consequence of this conception the ground for fear of the dead was touched as least as possible. In those parts of the Archipelago where native principalities originated, the principality's territory was considered to constitute a private domain at the prince's discretion, who in consequence of this conception at pleasure granted to and withdrew from the members of his family, his officials or favourites plots of land in stead of wages and assistances. The main people were not free to remove from their dwelling places. Each plot of land had its own stock of human occupants who were bound to till the soil for the maintenance of the holder of the apanage and to secure, if possible, besides for themselves a living. In the first case the dead and in the second one the prince stood between the ground and the living. In both cases it was for a right of the living on the ground impossible to germinate. These, the living, were only admitted to a share in the common use of the land during lifetime. Agriculture in that period, not resting on private interest but on the principle of bounded duty towards either the dead or the prince, did not find the lever it wanted for its furtherance. The prevailing land law checked all spirit of entreprize with the tillers of the soil and therewith kept the moving spirit of agriculture out of the door.

On this period, void of all private ground rights, succeeded a period initiatory to positive rights on the land for the natives. The Netherland Government, when its authority was re-established in the Archipelago after the conclusion of the Napoleonic wars, proclaimed the villages and the adjacent fields the property of each village community, subject to the tribute of a yearly rent due to Government, however with some res-

trictions in the use of this land. The first of these restrictions was an interdiction to sell plots of land to non-natives or to dispose otherwise of plots of land on behalf of non-natives. The second restriction concerned the compulsory cultivation, in the place of paying the rent for them and against a fixed remuneration, of part of the field with such products as should be indicated by Government, these products to be at Government's disposal. For a better understanding of this last named restriction we have to look back at the time of the administration of the United East India Company.

The conquest of some parts of the Archipelago by this private corporation did at first not bring an other alteration in the legal state of things she found than that she considered the conquered parts of land as a freehold of her own, standing at her disposal. In the first century of her existence, however, she did not care to go in for agriculture, minding her trade business only. She preferred selling or granting parts of her freehold to private persons and so constituted private land property in the colony. She provided for the products she wanted for her home commerce by a system of liabilities charged upon this private property and, as far as her domain was not alienated, upon the native chieftains. The object she had in view was to maintain a monopoly of the commerce in spices and other produces of the Archipelago. So she subjected the land owners and the native chieftains in her territory to sell to her their produces as far as they were destined for export at prices fixed by herself. At the same time she claimed from the native chieftains what she called „contingents” i. e. fixed yearly quantities of certain products. Before her arrival in the Archipelago the production of export products was limited to spices: nutmegs, cloves and pepper. By her efforts the land was also made to produce for export coffee, sugar, cotton and indigo. In the antagonism of the spirit of monopoly and the spirit of colonization which characterised the administration of the East India Company the effects of the last were curtailed by the methods of the first and agriculture had but a poor chance to thrive. But although the East India Company, by sticking to her monopoly, checked private agricultural enterprise, she



Assorting coffee in a warehouse.

by her policy of stimulating the produce of new goods of commercial value after all contributed to pave the way, specially to the development of the cultivation of commercial crops in this part of the earth, because by marketing these new produces in Holland, she could not fail to open there the eyes for the possibilities which this part of the earth might be credited for. The way she went in for the benefit of her monopoly therefore was destined to lead in the end to a free utilization of the land.

Such destination, however, was not to be reached soon after the Netherland Government had taken her place in the Archipelago. Long years then had still to pass before private agricultural enterprise got a fair chance there. The first times of the new political organization were not beneficial for liberal reforms. The newly erected Government in these first times could not miss the revenues of the former produce monopolies and so it maintained them provisionally and afterwards, when these monopolies had turned out to a steadily increasing source of revenues on behalf of the Motherland, Government would not miss them. So the former monopoly of the use of the land for agricultural purposes besides the freeholds, that in past times had been alienated, not only was maintained firmly but even extended as much as was possible. Only it now obtained a legal character while in those past times it had appeared as the utterance of a conqueror's discretionary will.

The system of monopolizing the land was built upon the legal base that the rights on the ground constituted a grant from Government to the natives and so had to be exercised under the restrictions Government found fit to put to this grant. Now while on the one side Government reserved the rights on ground to the natives only, it on the other side stipulated the use of part of the ground with their compulsory but paid labour it its own behalf. This legal system making two parts of the land, one for the maintenance of the natives and another for the maintenance of Government, and forbidding the use of the land outside the alienated freeholds to everybody else, was meant as a protection of the natives against foreigners, who were considered as intruders and dangerous adventurers, and

as a protection of the fiscal interests of both the colony and the Motherland. It was highly instrumental in extending the native agriculture. In the absence of private enterprises the native population found no other occupation or means of existence than tilling the soil and so one for all they applied to agriculture for a living. In those remote days wherein rail conveyance was still unknown in the colony and no Suez canal yet allowed of sea communication by steamer, this native agriculture obviously could have no other object than the produce of the necessary amount of food for the native community. In consequence of these circumstances the Government policy had for its tendency to build up an agrarian system wherein the land was divided in about as many plots as there were full grown men to be attended to.

In former times the consideration of the land as the prince's private property or as the inviolable domain of the dead forefathers of the clan prevented the calling into existence of the Roman legal idea of land ownership. Afterwards, having by the Netherland Government been proclaimed free tenants of the land they were accustomed to till, the natives would have found an opportunity to let the seed of that legal idea germinate by an impulse from their side, if the circumstances had been favourable to that evolution. On account of the prevailing social and legal conditions, on the contrary, they now by their impulse did prevail the rule: a man a share in the ground, and in virtue of that rule came to consider themselves more in the character of temporary boarders for lifetime of the ground than in the character of freeholders of an inheritable plot of land. It will be easily intelligible that this legal conception of their relation to the ground cannot have missed to influence their agriculture. This conception must have been noxious for their conception of agriculture as a vocation and a lever for raising their social, economical and cultural level. In consequence of this agrarian system the native agriculture has undergone not much betterment. In fact cheap rail conveyance has in aftertime brought some relief to this native agriculture by rendering useful the cultivation, besides their own food, of products fit for export such as coconut (copra), kapok and tea,



View in an old plantation of Java coffee, high-Smeroe, Malang,
with dadap as shade tree.

beans and groundnuts, which cannot bear a costly transport, and by opening up a large home market for their food products. In the best parts of Java the value of the yearly outturn per acre of this native agriculture secures nowadays an average of \$ 35.— In other parts it is much less and would, even in this land of cheap living, hardly be sufficient for a family to meet its requirements, if the revenues of the house-yard, where fruit trees and vegetable for sale in the market are planted and some poultry is kept, did not come to the rescue. However, if this agriculture cannot claim the merit that it educates the native population to wealth, it may make its boast that it tends to maintain the population in a state of economical independence and to avert from it the peril of famine with the resource of a share of land to the extent of not full two acres per family. It therefore may with some right be considered as the providence of the native population.

This second period in the evolution of the Netherlands India land policy was decisive in making Netherlands East India an outspoken agrarian country. This land policy pursued a double object, firstly to grant the land to the native population and make her maintain herself by agriculture, secondly to monopolize the use of part of the land besides in behalf of Government. We have seen how the object pursued in behalf of the native population was reached. Now some light may be thrown on the results of the land policy as far as this was carried on in behalf of Government herself. With great energy Government exercised her rights in extending the cultivation of coffee and starting the cultivation of sugar cane, tobacco and tea, at the same time admitting private enterprise to work the crude crops into marketable products in adequate factories. In this way the system was conducive to private enterprise getting a foot in the country and creative of private interest. The more extension was given to Government cultures the more importance private interests gained and the more intently these latter insisted on their admittance to agricultural rights. Monopoly, after having disclosed the possibilities of the country, could in the long run no more resist to this pressure: it evacuated

its positions one after the other and finished by opening the land fairly to private agricultural enterprise.

With this legal reform the evolution of land policy 45 years ago entered into its third period in which the colony still finds itself presently. In *this third period* the admittance of private enterprise to a use of the land has received a legal base in this way that non-occupied vacancies of land on demand have been opened to a grant in a long time lease (75 years) at a moderate rent and the opportunity has been opened to take fields occupied by native agriculture on hire under Government control for a short space of time (1 year or a couple of years). The interdiction of land sale valid for natives to non-natives has been maintained. So only a temporary use of parts (not more than $\frac{1}{3}$ of a village area at a time) of the native fields is allowed of and the fields that have been taken on hire must after a short time return to their native occupants. By these dispositions a dispossession of the natives of their fields is prevented and at the same time these fields can be utilized for an agriculture of a much wider scope than lies within the reach of the native community. The consequence of this legal system of short timed leases is that the lessee must bargain every year new grounds with the natives and change grounds every year, that he has no property to offer for mortgage and therefore is handicapped in his credit, but in its results it has been highly beneficial for the progress of the colony. Namely the legal system of long timed leases of vacant land may be credited as greatly instrumental in furthering the colony's interest. These grants are available to everybody, either physical person or corporation, who is subject to Netherland's or Netherlands India law. They are saleable and mortgageable and enjoy a freedom of land tax during the first ten years. The holder virtually enjoys the same rights as an owner on condition to pay yearly the fixed rent. In the last years Government has added the condition that within a space of time, to be fixed in the deed of grant, a part of the granted land, that namely is fixed there, must have been planted.

This legislation opened the doors of the colony to agriculture carried on a capitalistic base and on industrial and scientific



Cacao- hybrid Djatiroenggo, with „Dadap” as shade tree.

lines. It put at her disposal one of the means of pursuing the objects which in former times monopoly has discovered, to know the cultivation of coffee, sugar cane, tea, cinchona, cocoa, indigo, tobacco, rubber, sisal and more other useful plants. Agriculture answered to this appeal by covering Java and a part of Sumatra with a great number of various enterprises. At present this so-called European agriculture is occupying in the colony one and a quarter millions of acres, of which two thirds in long timed and one third in short timed, yearly, leases and the aggregate worth of its yearly exports is estimated at \$ 160,000,000.—

To resume the influence of the land policy on the agrarian system of the colony we may conclude that it has framed two types of agriculture: the so-called native and the so-called European agriculture, of which the first has detailed the land in very small shares, roughly corresponding with the number of the constituents of the native community, and the other one operates with large plots of lands (1000 acres and more), capital and skilled labour. The aggregate capital invested in this last named type of agriculture has been estimated at \$ 500,000,000.— and the white staff employed therein at 10,000 heads.

To these two types are corresponding two other types of agriculture, which the shape of the land accounts for, viz. the lowland and the highland cultures, while this last distinction for a great extension—though not covering the whole length of it—runs parallel with a third distinction, to know that of annual and of perennial cultures, this last expression taken in the meaning of cultures lasting for a long space of time.

The lowland cultures derive their main feature from their connection with irrigation. Although on the one side the irrigated fields are not limited to the lowlands and many plateaux and even high mountain slopes partake of irrigation, and on the other side many lowland fields are not accessible to irrigation water, the lowland crops as a whole may be considered to be reared with the aid of irrigation and this has stamped them with a particular mark. Irrigation water being obviously mostly at disposal on the flat lowlands and on the foothills, these areas have by preference found a destination for the cul-

tures that show a weak resistance to drought, such as rice, sugar cane, tobacco, corn, beans, groundnuts, etc. The more so because this other reason concurred to give them such a destination that these cultures are delineated for such a destination by their fitness for successive cultivation in a continuous curriculum. As soon as a crop of the named cultures has been harvested the soil is tilled for a different crop, even — and this in divergence from the customs in other countries — in the case of sugar cane. By this succession of different crops the soil is kept in good condition for continuous bearing, the available irrigation water is utilized during all the time throughout the whole year and, if corn, beans, tobacco or groundnuts follow on rice, two and sometimes three crops a year are made. In this way also it happens that the annual cultures for the greater part coincide with the lowland cultures. Exceptionally irrigated lowland fields are without interruption in both monsoons successively planted with rice. Next to irrigation the principal feature of the lowland agriculture is the alternation of cultures.

A consequence of this characteristic is the necessity of ploughing or digging the soil anew after each crop. Saturated by irrigation water after the ricefields are harvested it wants to be drained and aerated before it is fresh again to bear a new crop. So a great deal of work is required for these lowland cultures and as in the prevailing conditions mechanical ploughing is not remunerative for most of the lowlands, this agriculture yearly employs a great amount of hand labour.

Besides the above named cultures, the more drought resisting cultures such as groundnuts, cassava, castorbeans, cotton, etc. occur on the lowlands which lack irrigation, while of the perennial cultures coconut, kapok, pepper, nutmegs and teak also are to be brought home to the lowlands, although these latter also thrive on the lower and middle highlands. As far as dry grounds are concerned the limits between lowland and highland cultures however are not rigorously drawn.

Of the highland cultures the most conspicuous are *tea*, *coffee*, *cinchona*, *pepper*, *nutmegs*, *cloves*, *coca* and *cocoa*. They occupy the non-irrigable mountain slopes and plateaux at heights va-



Warehouse at Soerabaya.

rying from 1000 to 7000 feet above sea-level, cinchona and tea seeking for the greatest heights, while the other cultures require milder climatic conditions. As far as most of fruit bearing plants are concerned, those regions are preferred where a period of abundant rainfall alternates with a period of uninterrupted drought.

The object of these various cultures is manifold. It lies either in the fruits, the leaves, the roots, the stalk, the bark or the lumber of the plant. For their *fruits* are cultivated: rice, corn, beans, groundnuts, coconuts, nutmegs, cloves, coffee, cocoa and kapok, for their *leaves*: tea, tobacco, sisal, citronella-oil grass and coca, for their *roots*: cassava and sweet potatoes, for its *stalk*: sugar cane, for the production of their *bark*: rubber and for its *lumber*: teak. These various objects necessarily cause a great divergence in the methods to be applied on each culture, but they all have, specially in the moist parts of the country, this in common that they for a great deal consist of a struggle against ill weeds and herbs which, if not assiduously extirped, soon would cover the soil and suppress the cultivations. When young the plants of all sorts require care and protection against this danger and simultaneously often also against animal and fungus pests. So all agriculture, whatever its object may be, necessitates much ground work which all has to be done by hand labour. Besides this object the collecting of the crops lays another heavy claim on the available amount of labour. Therefore the labour question ranks among the most pressing which agriculture has to face. In the agricultural quarters outside Java labour contracts for three years are allowed but at Java, where agriculture has found its greatest extension, no contracted labour is admitted. There agriculture has to provide itself on a labour market which the labourer is free to enter or to leave at all times at his leisure. In the crowded lowlands the labour question is less stringent than in the highlands with their less dense population. There the social law of accomodation imposes the necessity to provide for houses, compounds, market halls and other commodities on the estates in behalf of the natives who come to offer their labour.

The technical and scientific questions which agriculture has to deal with are solved by experimental and scientific research, for which object special institutes have been established. The finished articles of the crops are as far as the so-called European agriculture is concerned, and as far as is possible mechanically worked in sugar-, tea-, rubber-, cocoa-, fibre-, rice-, oil- and other factories, which in the highlands often are provided with electric waterpower installations. In this part of the work, where they can come to their due, labour saving schemes are not spared.

In marketing their products the different types of agriculture also follow — at least to a great extent — the different lines which delineate their distribution, for while the native agriculture finds a home market to take up her products, the European agriculture depends upon the foreign market for the sale of hers. So we may conclude this brief general survey of agriculture in Netherland East India by stating that in consequence of legal, geographical and social differences there two types of agriculture have been framed, which have in common neither the same objects, neither the same methods, neither the same legal foundation, neither the same markets. With all their divergences they however have in common that both are the great supporters as well of the native as of the European community.

Statement, showing the value (dollars) of the principal agricultural products exported from Netherlands East India during the year 1912. *)

Products.	J a v a \$	Possessions beyond Java. \$	T o t a l. \$
Sugar	53 685.000	1.000	53.686.000
Tobacco.	16 360.000	22.143.000	38.503.000
Copra.	7.370.000	12.428 000	19.798.000
Coffee	9.642 000	2.708.000	12.350.000
Tea	9.337.000	—	9.337.000
Rubber and gutta percha (cultivated)	2.398.000	5 962.000	8.260.000
Pepper and cubebs.	2 863.000	2.618 000	5.481.000
Products of cassava.	3.125.000	41 000	3.166.000
Kapok	2.611 000	302 000	2.913.000
Rice.	2.811.000	151.000	2.962.000
Betelnuts.	272.000	1.446.000	1.718.000
Gambir.		1.704 000	1.704.000
Groundnuts	1.097 000	166.000	1.263.000
Cinchona-bark.	1 176 000	8.000	1 184.000
Maize	562.000	412.000	974 000
Teakwood.	960.000	—	960 000
Cotton.	311.000	494 000	805.000
Fibres.	873.000	7.000	880 000
Cocoa	570.000	18.000	588.000
Nutmegs	84.000	497.000	581.000
Coca.	504.000	—	504.000
Mace	50 000	399.000	449.000
Quinine.	298.000	—	298.000
Oils, coconut, ground- nut-, etc.	14 000	250.000	264.000
Oils, essential	159.000	53.000	212.000
Indigo.	27.000	—	27.000
Other agricultural products	759.000	403.000	1.162.000
Total agricultural and tectonic products.	117.918.000	52.211.000	170.129.000
All other goods, incl. bullion and coin. .	21.668.000	47.068.000	68.736.000
Total exports . . .	139.586.000	99.279.000	238.865 000

*) According to the official Neth. East Indian statistics.

